REPORT No.: SZ24040284E01

TEST REPORT

APPLICANT	:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
PRODUCT NAME	:	Mobile Phone
MODEL NAME	:	CPH2641, CPH2669, CPH3669
BRAND NAME	:	OPPO
FCC ID	:	R9C-OP23318
STANDARD(S)	:	47 CFR Part 15 Subpart B
RECEIPT DATE	:	2024-05-07
TEST DATE	:	2024-05-23 to 2024-05-24
ISSUE DATE	:	2024-06-06

Edited by: Chen Bilian

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DIRECTORY

Change History		
Version	**Date**	**Reason for Change**
1.0	2024-06-06	First edition

1. Technical Information

Note: Provide by applicant

1.1. Applicant and Manufacturer Information

Applicant:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Applicant Address:	NO.18 HaiBin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China
Manufacturer:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Manufacturer Address:	NO.18 HaiBin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Mobile Phone
EUT No.:	3#, 4#, 6#, 44#, 47#
Hardware Version:	11
Software Version:	ColorOS 14.0
Tx Frequency:	GSM850: 824 MHz ~ 849 MHz GSM1900: 1850 MHz ~ 1910 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 18: 815 MHz ~ 830 MHz LTE Band 19: 830 MHz ~ 845 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2535 MHz ~ 2655 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/ac/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz;

	5500 MHz ~ 5700 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz	
Rx Frequency:	GSM850: 869 MHz ~ 894 MHz GSM1900: 1930 MHz ~ 1990 MHz WCDMA Band II: 1930 MHz ~ 1990 MHz WCDMA Band IV: 2110 MHz ~ 2155 MHz WCDMA Band V: 869 MHz ~ 894 MHz LTE Band 2: 1930 MHz ~ 1990 MHz LTE Band 4: 2110 MHz ~ 2155 MHz LTE Band 5: 869 MHz ~ 894 MHz LTE Band 7: 2620 MHz ~ 2690 MHz LTE Band 12: 729 MHz ~ 746 MHz LTE Band 13: 746 MHz ~ 756 MHz LTE Band 17: 734 MHz ~ 746 MHz LTE Band 18: 860 MHz ~ 875 MHz LTE Band 19: 875 MHz ~ 890 MHz LTE Band 26: 859 MHz ~894 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2535 MHz ~ 2655 MHz LTE Band 66: 2110 MHz ~ 2180 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/ac/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS/Galileo/GLONASS/BDS: 1559 MHz ~ 1610 MHz FM: 87.5 MHz ~ 108 MHz	
Accessory:	**AC Adapter 1**	
	Brand Name:	SUPERVOOC
	Model No.:	VCB4JAUH
	Serial No.:	(N/A, marked #1 by test site)
	Rated Input:	100-240V~50/60Hz, 1.5A
	Rated Output:	5V⎓2A or 5-11V⎓4.1A MAX
	Manufacturer:	Jiangsu Chenyang Electron Co.,Ltd.
	AC Adapter 2	
	Brand Name:	SUPERVOOC
	Model No.:	VCB4JAUH
	Serial No.:	(N/A, marked #1 by test site)
	Rated Input:	100-240V~50/60Hz, 1.5A

	Rated Output:	5V⎓2A or 5-11V⎓4.1A MAX
	Manufacturer:	Huizhou Golden Lake Industrial Co., Ltd.
	Battery 1	
	Brand Name:	SUPERVOOC
	Model No.:	BLPA77
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	Typical: 5100mAh, Rated: 4970mAh
	Rated Voltage:	3.91V
	Charge Limit:	4.5V
	Manufacturer:	SUNWODA Electronic Co., Ltd.
	Battery 2	
	Brand Name:	SUPERVOOC
	Model No.:	BLPA77
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	Typical: 5100mAh, Rated: 4970mAh
	Rated Voltage:	3.91V
	Charge Limit:	4.5V
	Manufacturer:	Dongguan NVT Technology Co., Ltd.
	USB Cable	
	Model:	DL154

Note:

1. According to the certificate holder, they declared that the product name: Mobile Phone, with model name: CPH2641, CPH2669, CPH3669 have the same hardware and software, only the memory and the rear camera are different, Details are as follows:

Model Name	CPH2641	CPH2669	CPH3669
Memory	4G+128G	4G+256G	8G+256G
Camera	Back:8M, Front:5M	Back:50M, Front:5M	Back:50M, Front:5M

   All models have been tested for RE and CE, only the worst case (CPH2669) is recorded in this report.

2. There are two kinds of adapters, both adapters have been tested. For the CE and RE, only the worst case (Adapter 2) is recorded in this report.
3. There are two kinds of batteries, both batteries have been tested. For the CE and RE, only the

worst case (Battery 1) is recorded in this report.

4. For a more detailed description, please refer to specification or user's manual supplied by the applicant and/or manufacturer.

2. Test Results

2.1. Applied Reference Documents

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart B:

No.	Identity	Document Title
1	47 CFR Part 15	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result	Method Determination Remark
1	15.107	Conducted Emission	2024.05.23	Wang Deyong	PASS	No deviation
2	15.109	Radiated Emission	2024.05.24	Yuan Zihong	PASS	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in ANSI C63.4-2014.

Note 2: Additions to, deviation, or exclusions from the method shall be judged in the “method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 3: When the test result is a critical value,we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

2.2. EUT Setup and Operating Conditions

Note: All of the following test modes are tested in all the test items.

Test Item	
Mode 1 :	EUT + GSM850 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 2 :	EUT + GSM1900 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 3 :	EUT + WCDMA Band II Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 4 :	EUT + WCDMA Band IV Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 5 :	EUT + WCDMA Band V Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 6 :	EUT + LTE Band 2 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 7 :	EUT + LTE Band 4 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 8 :	EUT + LTE Band 5 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 9 :	EUT + LTE Band 7 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 10 :	EUT + LTE Band 12 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 11 :	EUT + LTE Band 13 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 12 :	EUT + LTE Band 17 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 13 :	EUT + LTE Band 18 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 14 :	EUT + LTE Band 19 Idle + Bluetooth Idle + 5G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 15 :	EUT + LTE Band 26 Idle + Bluetooth Idle + 2.4G WLAN Idle + GPS Rx + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 16 :	EUT + LTE Band 38 Idle + Bluetooth Idle + 5G WLAN Idle + Galileo Rx + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode
Mode 17 :	EUT + LTE Band 41 Idle + Bluetooth Idle + 2.4G WLAN Idle + GLONASS Rx + Battery + AC Adapter + USB Cable + Earphone + Rear Camera Working Mode

Mode 18 :	EUT + LTE Band 66 Idle + Bluetooth Idle + 5G WLAN Idle + BDS Rx + Battery + AC Adapter + USB Cable+ Earphone + Rear Camera Working Mode
Mode 19 :	**EUT + WCDMA Band V Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + AC Adapter + USB Cable + Earphone + Front Camera Working Mode**
Mode 20 :	EUT + LTE Band 4 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + USB Cable + Earphone + PC + Data Transmission Mode
Mode 21 :	EUT + FM Rx + Battery + AC Adapter + USB Cable + Earphone + FM Mode
Mode 22 :	**EUT + LTE Band 18 Idle + Bluetooth Idle + 2.4G WLAN Idle + Battery + PC + PC Adapter + USB Cable + Earphone + Rear Camera Working Mode**
Remark: The above test mode in boldface (Mode 22) was the worst case of conducted emission test, only the test data of these modes were reported. The above test mode in boldface (Mode 19) was the worst case of radiated emission test, only the test data of these modes were reported.	

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 - 60
Atmospheric Pressure (kPa):	86 - 106

3. 47 CFR Part 15B Requirements

3.1. Conducted Emission

3.1.1. Requirement

According to FCC section 15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

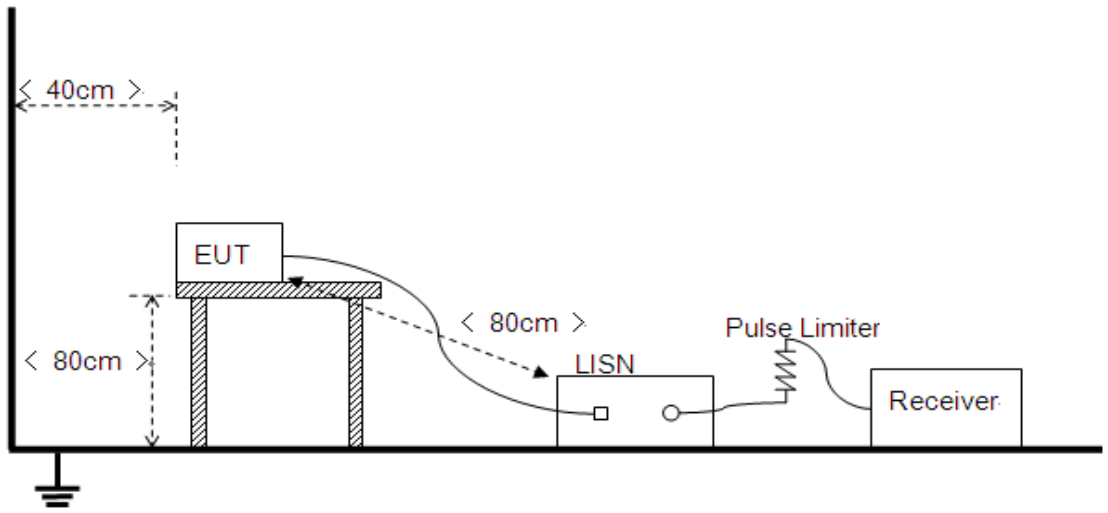
a) The limit subjects to the Class B digital device.

b) The lower limit shall apply at the band edges.

c) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

3.1.2. Test Setup

Please refer to Annex A for the photographs of the Test Configuration.



The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides 50Ω/50μH of coupling impedance for the measuring instrument. A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

The power strip or extension cord has been investigated to make sure that the LISN integrity inma intained with respect to the impedance characteristics as prescribed in ANSI C63.4-2014 at Clause 4.3.

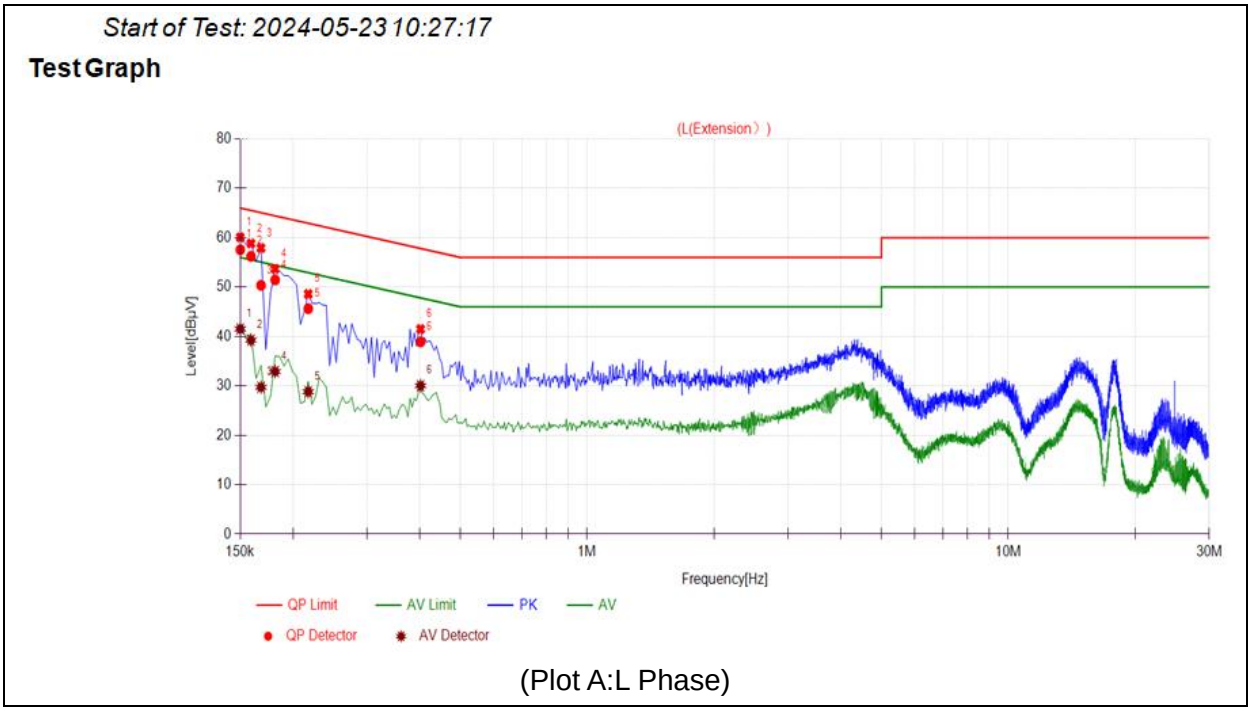
3.1.3. Test Result

Set RBW=9 kHz, VBW=30 kHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. All test modes are considered, refer to recorded points and plots below.

The measurement results are obtained as below:
$E\ [dB\mu V] = U_R[dB\mu V] + L_{Cable\ loss}\ [dB] + A_{Factor}\ [dB]$
U_R: Receiver Reading
A_{Factor}: Voltage Division Factor of LISN
$L_{Cable\ loss}$: Correction Factor Contains Pulse Limiter and Cable

During the test, the total correction Factor $L_{Cable\ loss}$ and A_{Factor} were built in test software.

A. Test Plot and Suspicious Points:

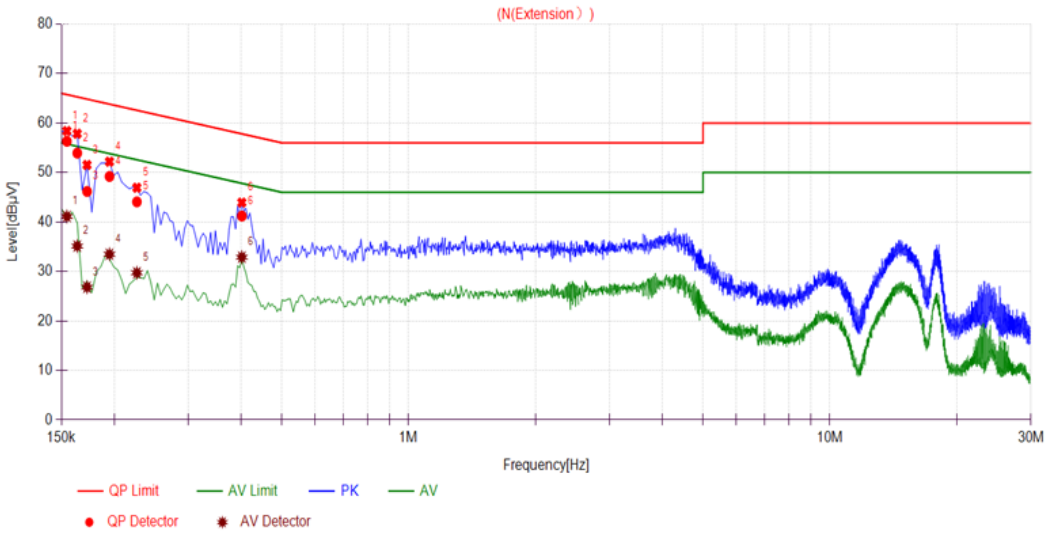


(Plot A:L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quasi-peak	Average	Quasi-peak	Average		
1	0.1500	57.55	41.53	66.00	56.00	Line	PASS
2	0.1590	56.23	39.27	65.52	55.52		PASS
3	0.1680	50.36	29.73	65.06	55.06		PASS
4	0.1815	51.46	32.91	64.42	54.42		PASS
5	0.2175	45.64	28.81	62.91	52.91		PASS
6	0.4020	38.91	30.04	57.81	47.81		PASS

Start of Test: 2024-05-23 10:32:33

Test Graph



(Plot B: N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quasi-peak	Average	Quasi-peak	Average		
1	0.1545	56.31	41.12	65.75	55.75	Neutral	PASS
2	0.1635	53.93	35.13	65.28	55.28		PASS
3	0.1725	46.17	26.82	64.84	54.84		PASS
4	0.1950	49.21	33.48	63.82	53.82		PASS
5	0.2265	44.07	29.73	62.58	52.58		PASS
6	0.4020	41.21	32.89	57.81	47.81		PASS

3.2. Radiated Emission

3.2.1. Requirement

According to FCC section 15.109 (a), the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency Range (MHz)	Field Strength Limitation at 3m Measurement Dist	
	(μV/m)	(dBμV/m)
30.0 - 88.0	100	20log 100
88.0 - 216.0	150	20log 150
216.0 - 960.0	200	20log 200
Above 960.0	500	20log 500

As shown in FCC section 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

Note:

1) The tighter limit shall apply at the boundary between two frequency range.
2) Limitation expressed indBμV/m is calculated by 20log Emission Level(μV/m).

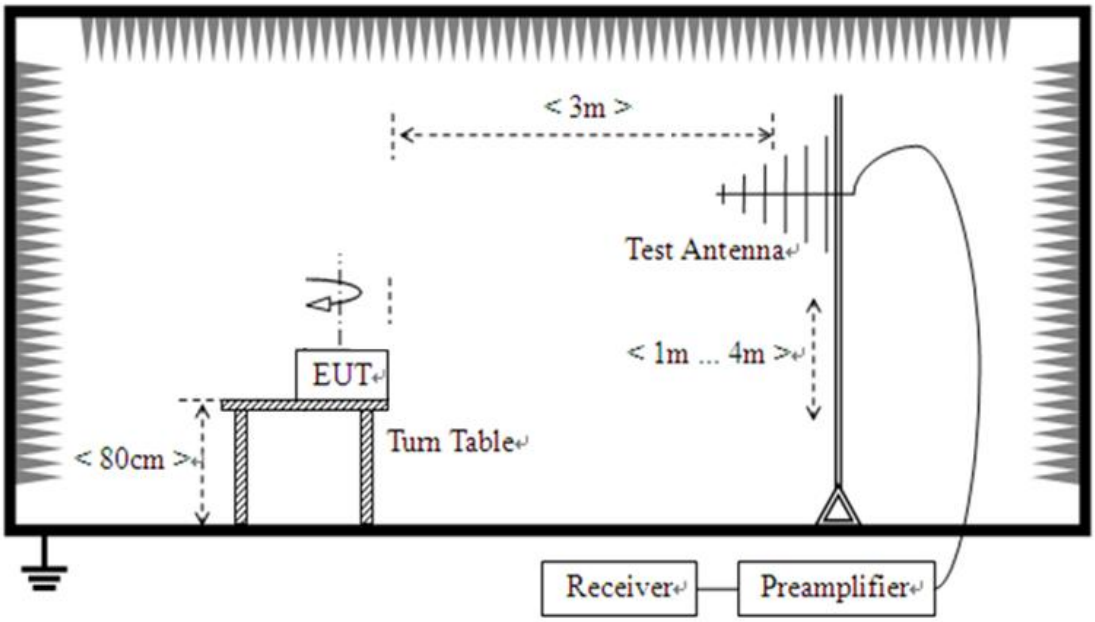
3.2.2. Frequency Range of Measurement

According to 15.33(b)(1), the frequency range of radiated measurement for the EUT is listed in the following table:

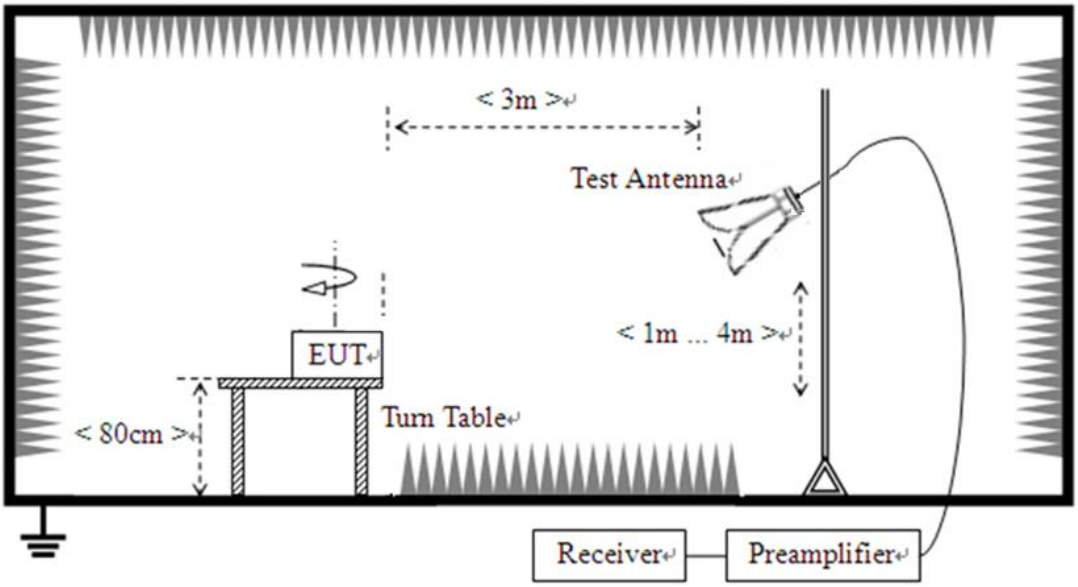
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30.
1.705–108	1000.
108–500	2000.
500–1000	5000.
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

3.2.3. Test Setup

1) For radiated emissions from 30MHz to1GHz



2) For radiated emissions above 1GHz



The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn Table, and keeps 3m away from the Test Antenna, which is mounted on variable-height antenna master tower.

For the test Antenna:

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz)are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

For measurements below 1GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video bandwidth is set to 3MHz for peak measurements and as applicable for average measurements.

3.2.4. Test Result

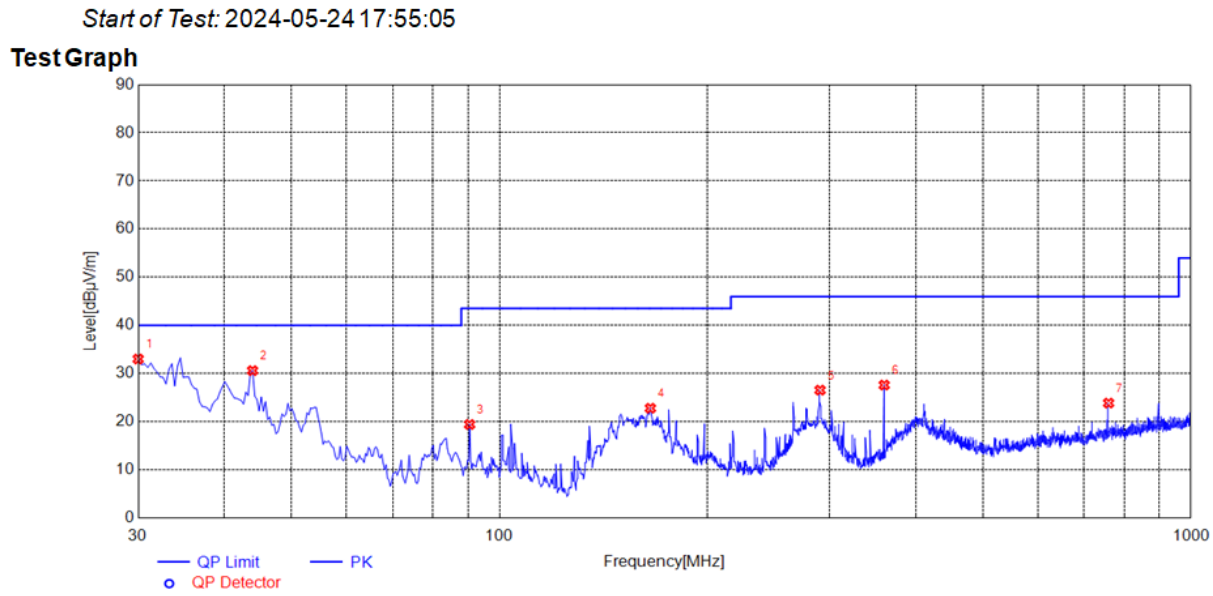
The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

The amplitude of emissions which (6GHz-30GHz) are attenuated more than 20 dB below the permissible value need not be reported.

The measurement results are obtained as below:
$E\ [dB\mu V/m] = U_R\ [dB\mu V] + A_T[dB] + A_{Factor}\ [dB]$; $A_T = L_{Cable\ loss}\ [dB] - G_{preamp}\ [dB]$
A_T: Total correction Factor except Antenna
U_R: Receiver Reading
G_{preamp}: Preamplifier Gain
A_{Factor}: Antenna Factor at 3m

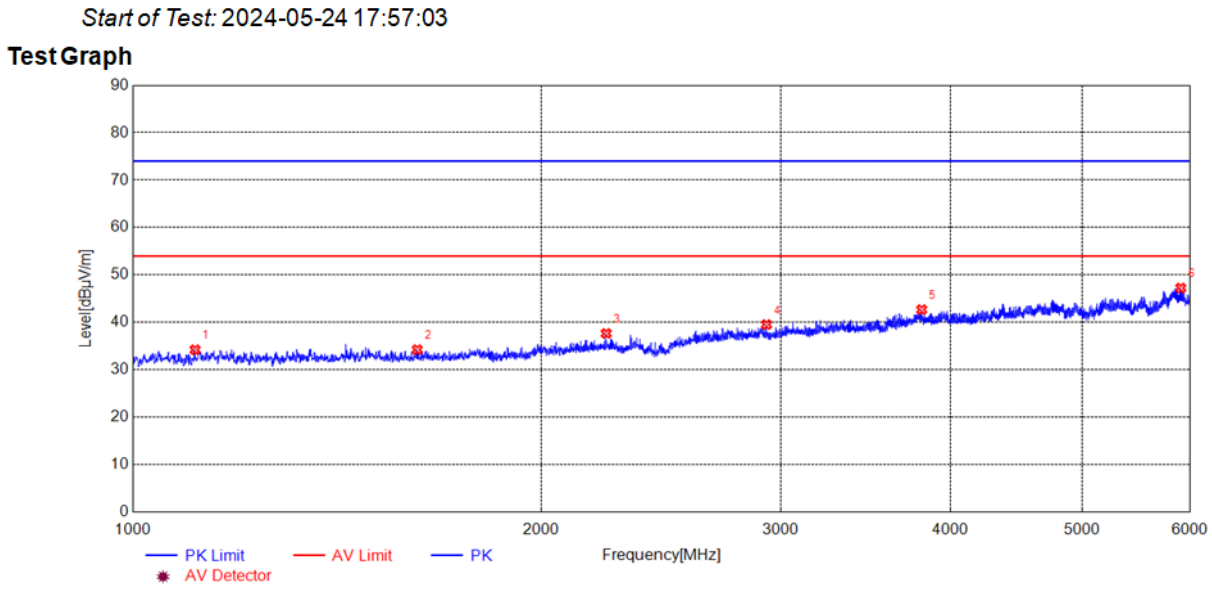
During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note: All radiated emission tests were performed in X, Y, Z axis direction, and only the worst axis test condition was recorded in this test report.



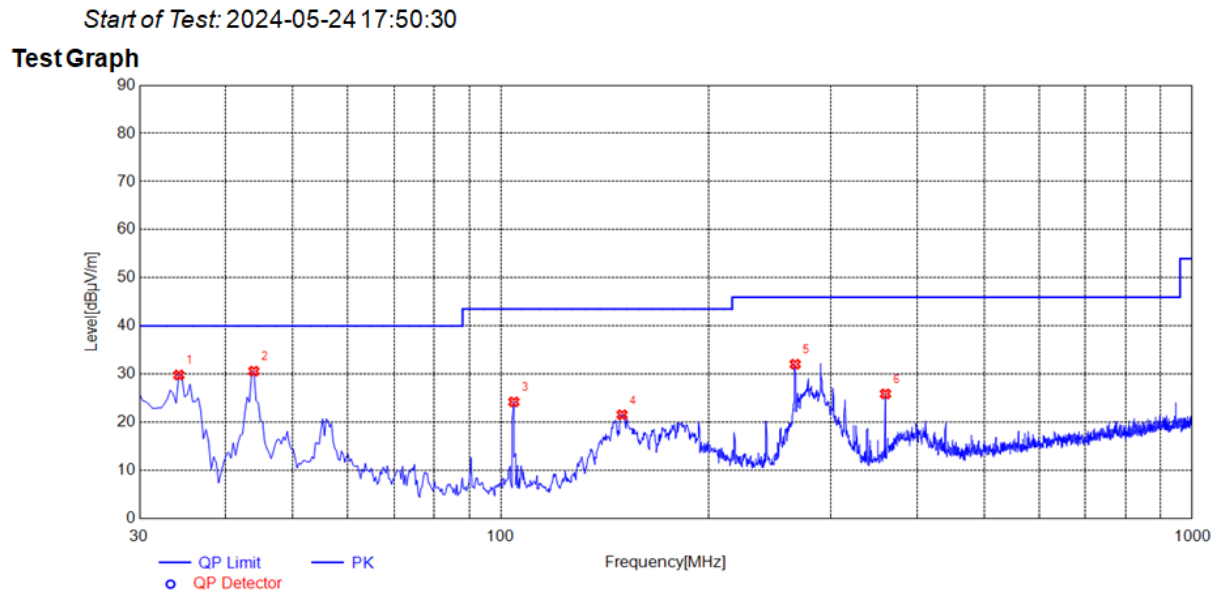
(Plot A: ANT-Vertical,30MHz - 1GHz)

No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBµV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	30.0000	33.02	N.A	N.A	N.A	40.00	N.A	V	PASS
2	43.9080	30.60	N.A	N.A	N.A	40.00	N.A	V	PASS
3	90.4835	19.43	N.A	N.A	N.A	43.50	N.A	V	PASS
4	165.1984	22.80	N.A	N.A	N.A	43.50	N.A	V	PASS
5	290.6936	26.56	N.A	N.A	N.A	46.00	N.A	V	PASS
6	359.9100	27.61	N.A	N.A	N.A	46.00	N.A	V	PASS
7	760.0067	23.87	N.A	N.A	N.A	46.00	N.A	V	PASS



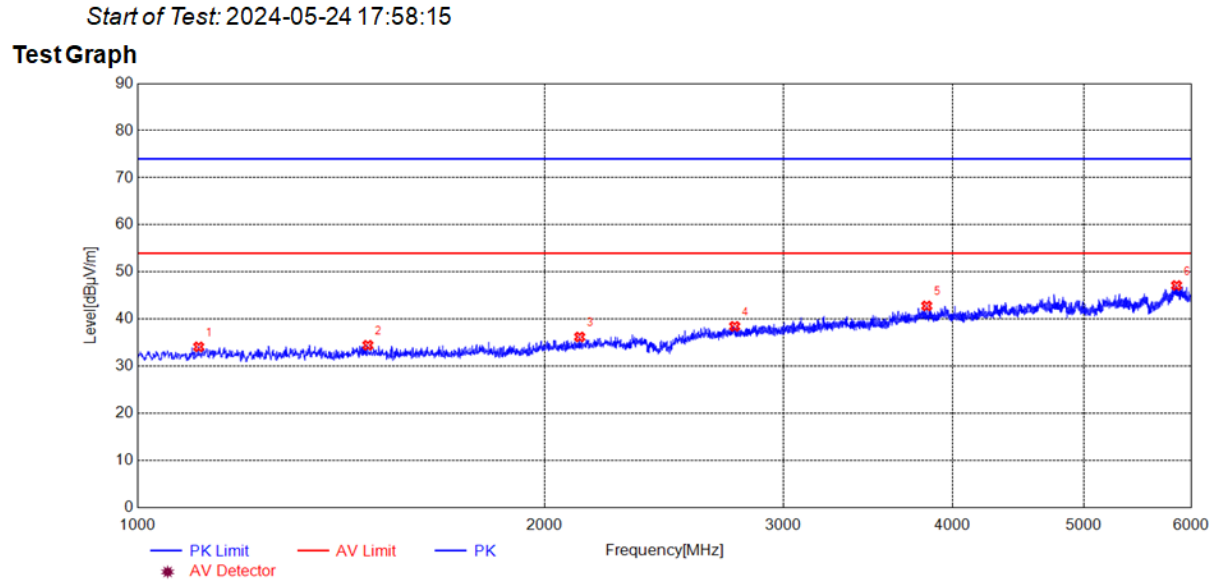
(Plot B: ANT-Vertical,1GHz - 6GHz)

No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBµV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	1111.6853	34.23	N.A	N.A	74.00	N.A	54.00	V	PASS
2	1620.1034	34.25	N.A	N.A	74.00	N.A	54.00	V	PASS
3	2231.8720	37.67	N.A	N.A	74.00	N.A	54.00	V	PASS
4	2928.6548	39.54	N.A	N.A	74.00	N.A	54.00	V	PASS
5	3810.4684	42.70	N.A	N.A	74.00	N.A	54.00	V	PASS
6	5911.6519	47.25	N.A	N.A	74.00	N.A	54.00	V	PASS



(Plot C:ANT- Horizontal, 30MHz - 1GHz)

No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBµV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	34.2047	29.83	N.A	N.A	N.A	40.00	N.A	H	PASS
2	43.9080	30.62	N.A	N.A	N.A	40.00	N.A	H	PASS
3	104.3915	24.24	N.A	N.A	N.A	43.50	N.A	H	PASS
4	149.6732	21.57	N.A	N.A	N.A	43.50	N.A	H	PASS
5	266.4355	32.06	N.A	N.A	N.A	46.00	N.A	H	PASS
6	359.9100	25.90	N.A	N.A	N.A	46.00	N.A	H	PASS



(Plot D:ANT- Horizontal, 1GHz - 6GHz)

No.	Fre. MHz	PK dBµV/m	QP dBµV/m	AV dBµV/m	Limit-PK dBµV/m	Limit-QP dBµV/m	Limit-AV dBµV/m	ANT	Verdict
1	1110.0183	34.13	N.A	N.A	74.00	N.A	54.00	H	PASS
2	1480.0800	34.47	N.A	N.A	74.00	N.A	54.00	H	PASS
3	2121.8536	36.23	N.A	N.A	74.00	N.A	54.00	H	PASS
4	2761.9603	38.48	N.A	N.A	74.00	N.A	54.00	H	PASS
5	3828.8048	42.82	N.A	N.A	74.00	N.A	54.00	H	PASS
6	5855.8093	47.15	N.A	N.A	74.00	N.A	54.00	H	PASS

Annex A Test Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Uncertainty of Conducted Emission Measurement

Measuring Uncertainty for a Level of Confidence of 95%(U=2Uc(y))	9kHz-150kHz	±3.3dB
	150kHz-30MHz	±2.8dB

Uncertainty of Radiated Emission Measurement

Measuring Uncertainty for a Level of Confidence of 95%(U=2Uc(y))	30MHz-200MHz	±5.06dB
	200MHz-1000MHz	±5.04dB
	1GHz-6GHz	±5.18dB
	6GHz-18GHz	±5.48dB

Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Accreditation Certificate

Accredited Testing Laboratory:	The FCC designation number is CN1192. Test firm registration number is 226174. (Shenzhen Morlab Communications Technology Co., Ltd.)

4. Test Software Utilized

Model	Version Number	Producer
TS+ -[JS32-RE]	Version 2.5.0.6	Tonscend
TS+ -[JS32-CE]	Version 2.5.0.0	Tonscend

5. Test Equipments Utilized

Description	Model	Serial No.	Manufacturer	Cal. Date	Due. Date
Bi-Log Antenna	VULB 9163	9163-519	SCHWARZBECK	2023/7/1	2024/6/30
Horn Antenna	BBHA 9120D	01774	SCHWARZBECK	2023/7/1	2024/6/30
Receiver	N9038A	MY56400093	KEYSIGHT	2024/1/25	2025/1/24
6db Attenuator	BW-N6W5+	E191001	Mini-circuits	2023/9/19	2024/9/18
Preamplifier	S020180L3203	61171/61172	LUCIX CORP.	2023/6/27	2024/6/26
Preamplifier	S10M100L3802	46732	LUCIX CORP.	2023/6/27	2024/6/26

Preamplifier	DCLNA0118-40 C-S	DS77209	Decentest	2023/7/4	2024/7/3
RF Coaxial Cable	PE330	MRE001	Pasternack	N/A	N/A
RF Coaxial Cable	CLU18	MRE002	Pasternack	N/A	N/A
RF Coaxial Cable	CLU18	MRE003	Pasternack	N/A	N/A
RF Coaxial Cable	QA360-40-KK-0.5	22290045	Qualwave	N/A	N/A
RF Coaxial Cable	QA360-40-KKF-2	22290046	Qualwave	N/A	N/A
RF Coaxial Cable	QA500-18-NN-5	22120181	Qualwave	N/A	N/A
RF Coaxial Cable	BNC	MRE04	Qualwave	N/A	N/A
Receiver	ESPI	101052	R&S	2023/6/21	2024/6/20
LISN	NSLK 8127	8127449	Schwarzbeck	2024/2/2	2025/2/1
10dB Pulse Limiter	VTSD 9561-F	VTSD 9561 F-B #206	SCHWARZBECK	2023/6/27	2024/6/26
System Simulator	CMW500	152038	R&S	2023/9/19	2024/9/18

6. Ancillary Equipment Utilized

Description	Model	Serial No.	Manufacturer
earphone	N/A	N/A	OPPO
PC	A1370	N/A	APPLE
PC Adapter	A1374	N/A	APPLE

END OF REPORT